

## Changing how the UMD is presented.

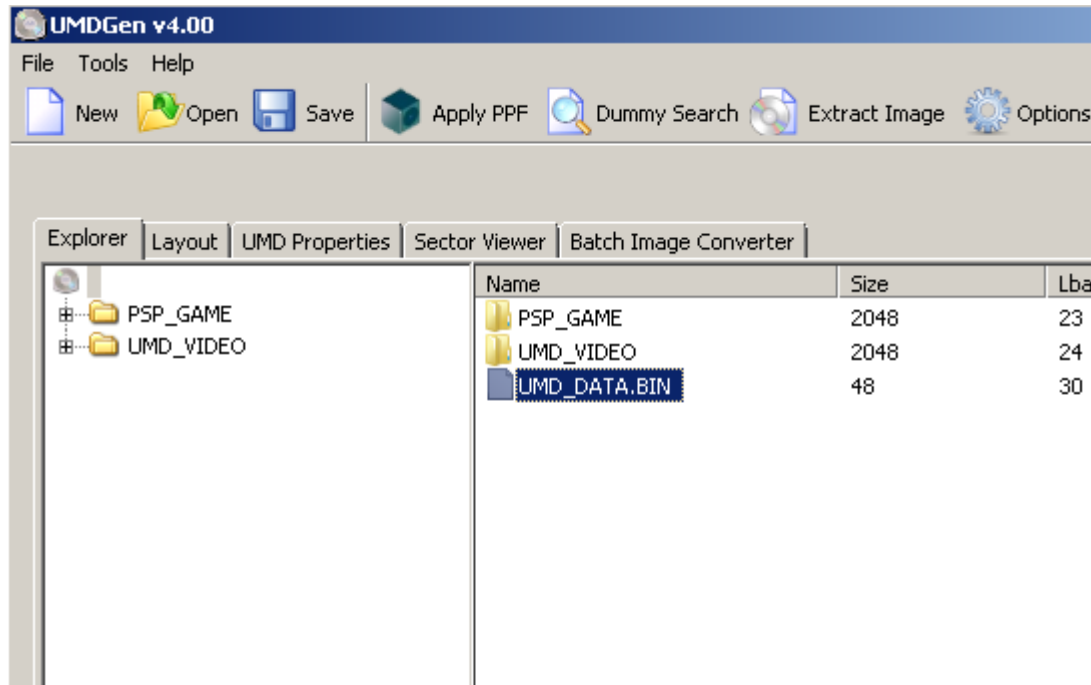
In this chapter I will describe how to change the way that the UMD is presented once it is loaded into your PSP. To do so we are going to change 5 files that can be found in the UMD\_VIDEO folder that's in the ISO. First we will extract the files we need, then change them and finally we will put the back.

Tools needed in this chapter:

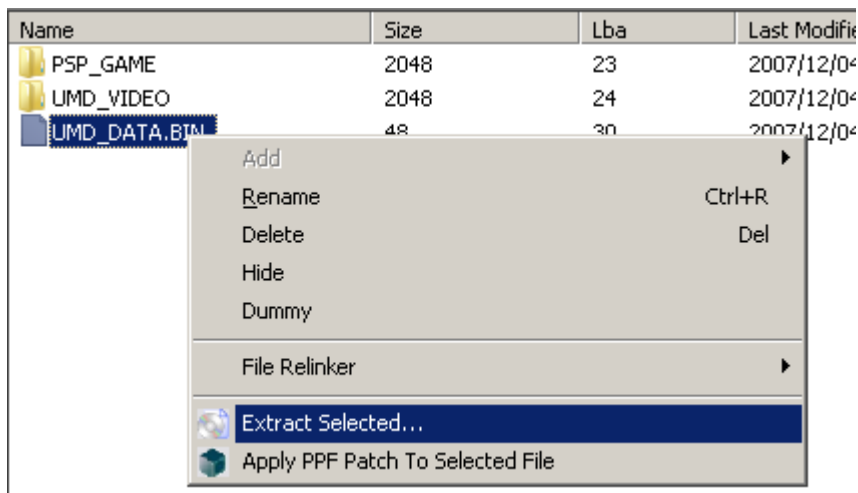
- UMDGen
- PBP Unpacker
- Any picture editing program (in this example I will use Windows Paint)
- Any Hex Editor program (in this example I will use XVI32, which is free)

First we will extract the files that we need from the UMD Video ISO file that we chose as a base for our own movie. We do this with **UMDGen**. For more information on UMDGen and ISO structure please read the chapter on generating the ISO file with UMDGen.

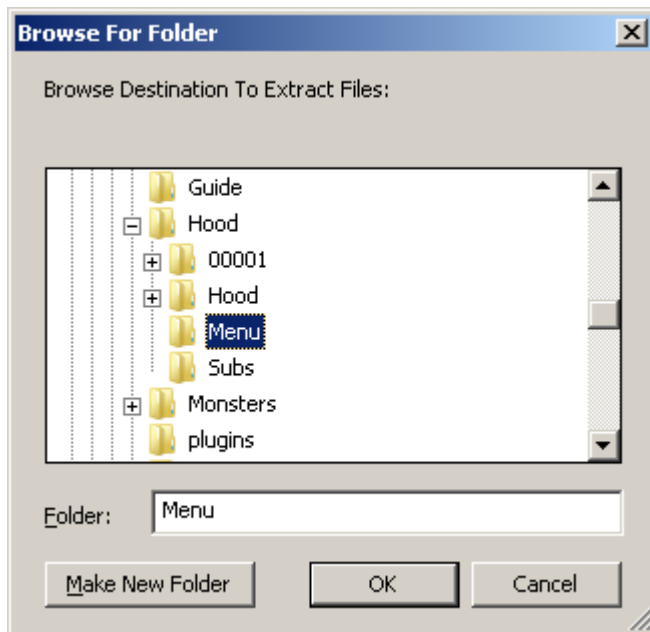
Start UMDGen, click **Open** and select and load the existing Video UMD ISO file that you will use as a base for your movie. We are going to extract 5 files. The first one you can see immediately after the ISO has loaded. It's **UMD\_DATA.BIN** which is located in the **root folder** of the ISO.



To extract it **right-click** the file, then select **Extract Selected...**



A new window will open and you can select a destination folder. Make sure it is a folder that you can find back later. I personally save these files in a new folder that I created in my work folder, called **Menu**.

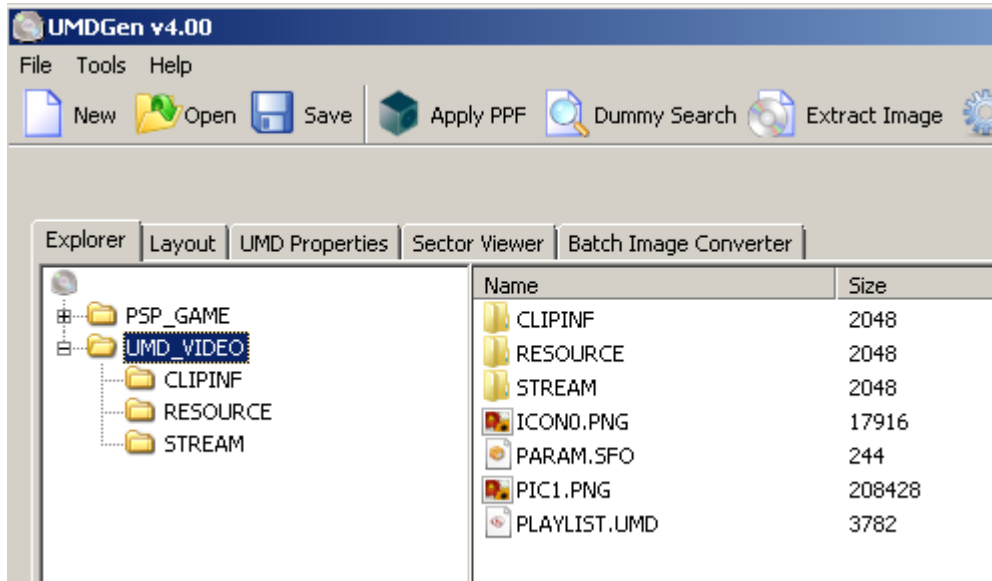


Once you have found your folder click **OK**.

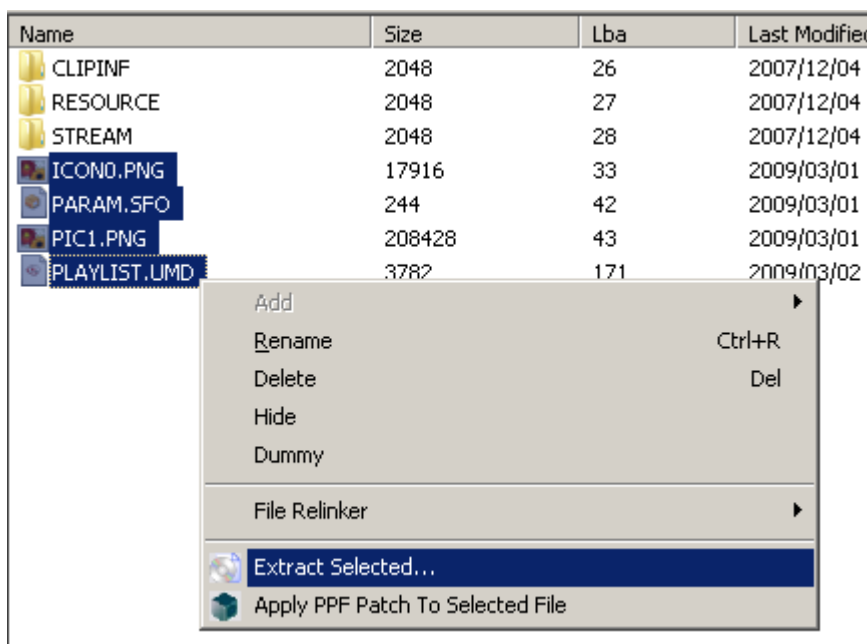
The other four files we need are:

PARAM.SFO  
 PLAYLIST.UMD  
 PIC1.PNG  
 ICON0.PNG

You can find them by selecting **UMD\_VIDEO** in the left pane.



Simply select them all, either with your mouse or by holding CTRL and clicking them one by one, and select **Extract Selected...** again.

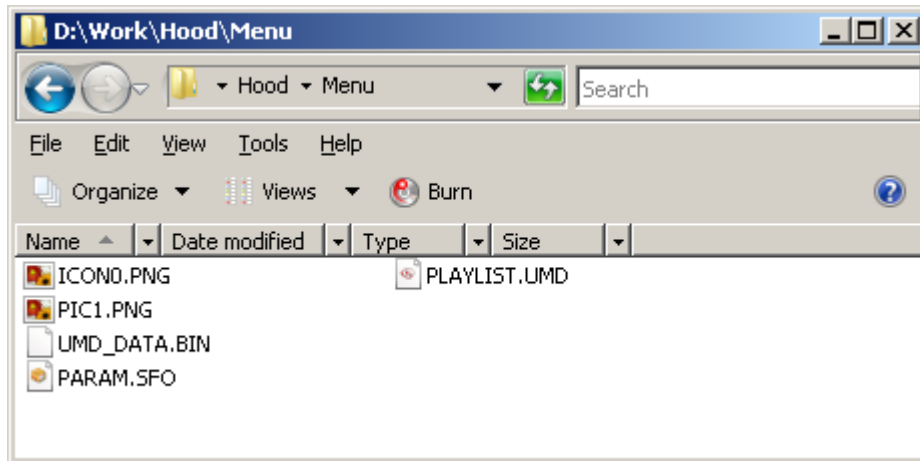


The **Browse for Folder** window will open again, save them in the same folder as where you saved UMD\_DATA.BIN.

After this you can close UMDGen. We won't need it till later.

Now let's start taking a closer look at the files we extracted and how we can edit them.

We have all files in our Menu folder:



Let's first look at the two **PNG** files, which are bitmaps. I have cheated a bit with these as I have taken them from my original Hoodwinked! release. What I would normally do for other movies that I encode is to find a suitable picture on the internet and cut it to the right size for use on the PSP.

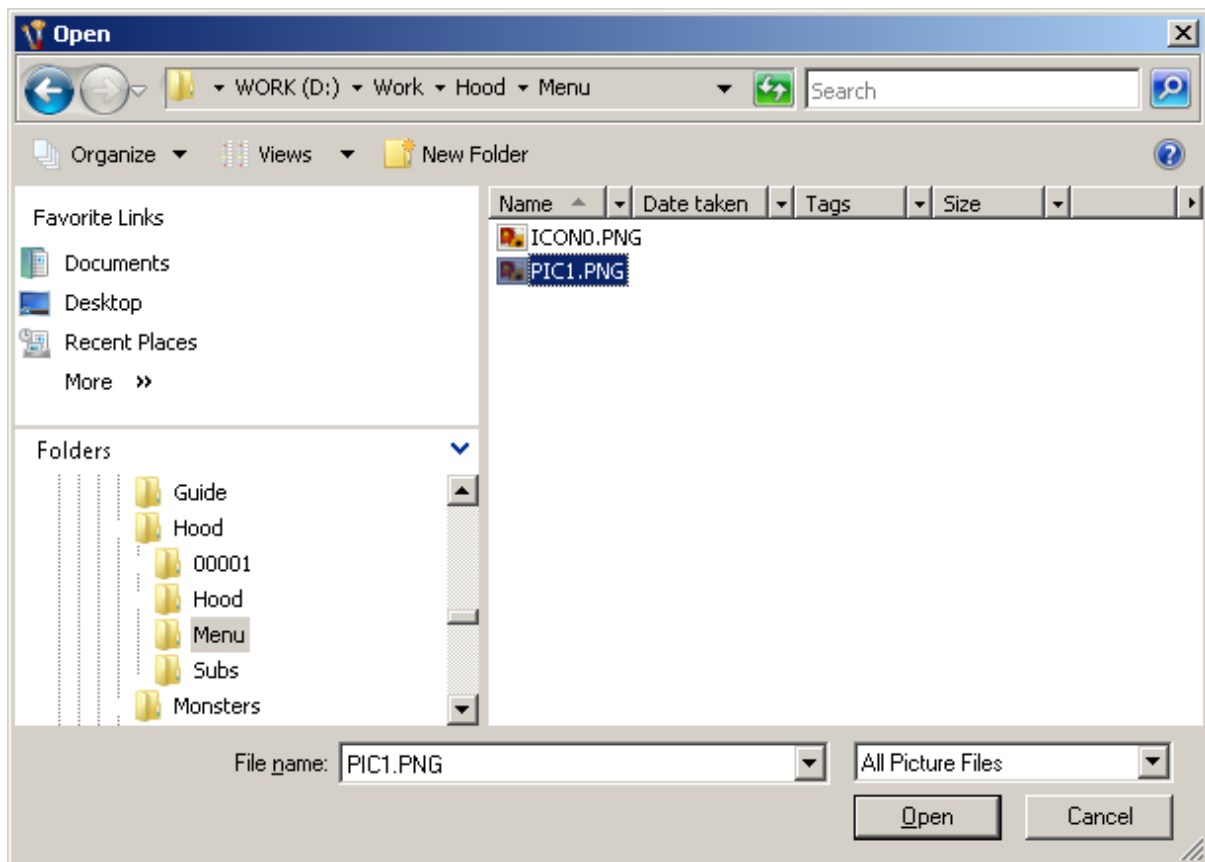
**PIC1.PNG** is the background/wallpaper picture. The file needs to be **PNG format** and the size needs to be exactly **480x272 pixels** (width x height). If you stick to these few simple rules you can put any photo in here. Here you can see the picture that I used in the original (version 1) release of Hoodwinked!



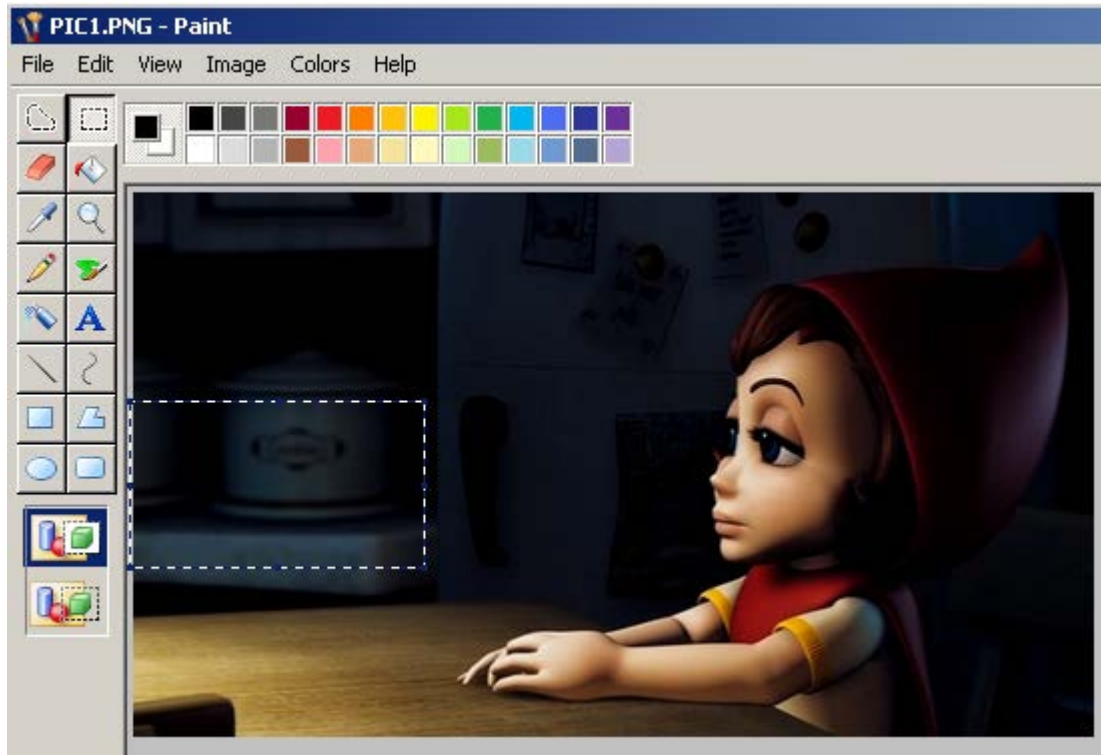
**ICON0.PNG** fits the flashing icon. This file also needs to be **PNG Format** and its size needs to be exactly **144x80 pixels** (width x height). Again, if you stick to these rules your picture will show fine. Here is the icon I used in the original Hoodwinked!



If you don't want a separate icon but want it to blend in with the background picture then you will need to **copy ICON0.PNG out from PIC1.PNG**. This can easily be done with **Paint**. Let's have a look. Start Paint and load **PIC1.PNG** into it.

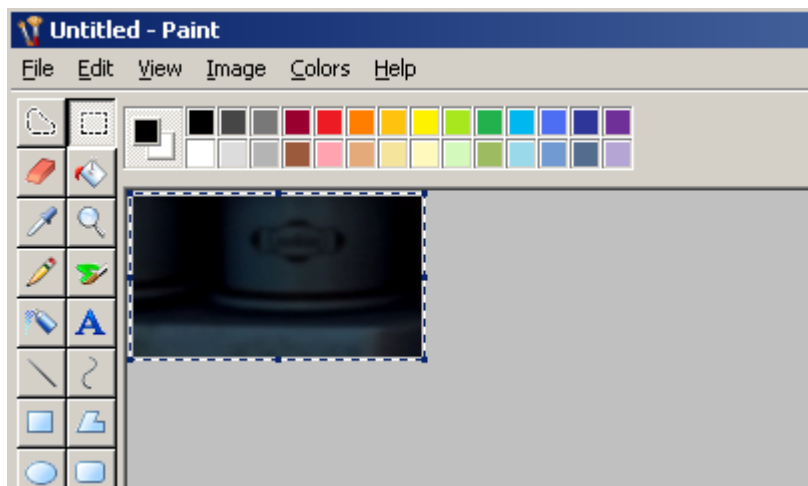


The picture is loaded. To copy out the icon you need the **Select** tool (you can already see it selected in above picture). And select the area with a size of **144x80** pixels **starting from pixel (0,106)**!



That's **0** pixels **horizontal**, **106** pixels **vertical**. The top-left corner is pixel **(0,0)**.

After having selected the correct area select **Edit -> Copy** from the menu (to make a copy of the selected area), then **File -> New** (to start a blank picture), then finally **Edit -> Paste** (to copy the selection into the new workspace).



Make sure the size is still 144x80 then select **File -> Save As...** from the menu and save this file as a **PNG file** with the name of **ICON0.PNG** into your menu folder, overwriting any existing file.

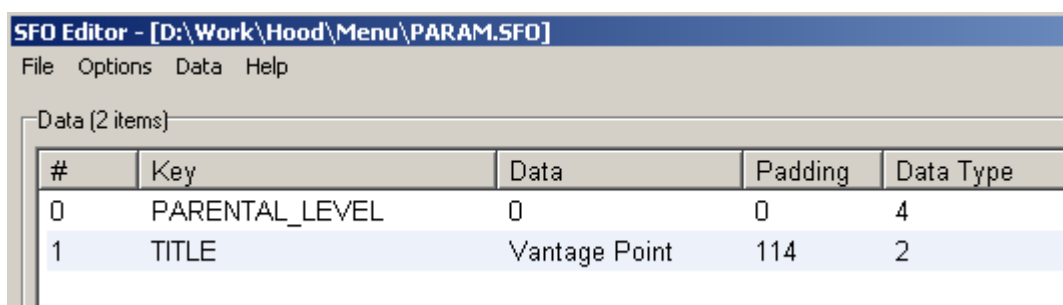
You will now have an icon that blends in perfectly with the background picture.

Ok, now let's have a look on how you can set the **UMD Title** that is shown in the UMD XMB menu. The title is stored in the file **PARAM.SFO**. We can open this file with **PBP Unpacker**. Start the tool.

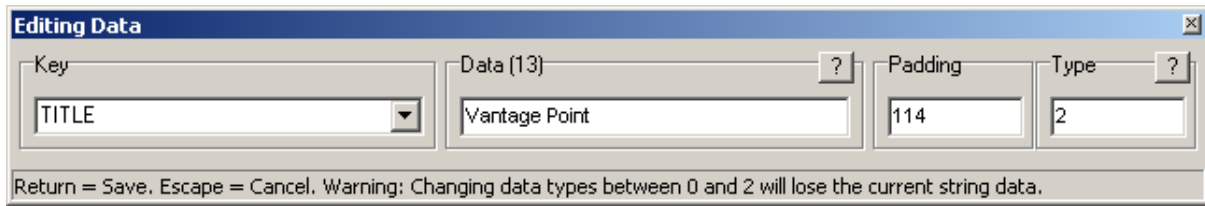


Click the big **Open** button and navigate to the **PARAM.SFO** file, select it and click **Open**.

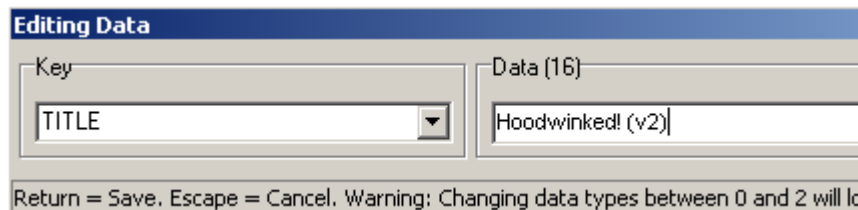
The **SFO Editor window** opens and you can the current title listed here.



Double-click the **TITLE** line to open the **Editing Data Window**.

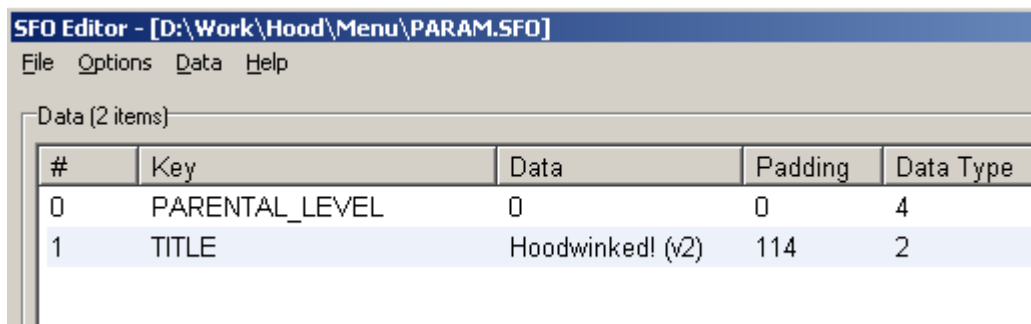


In this window only change the Data field in the middle. Put in the name of your movie.

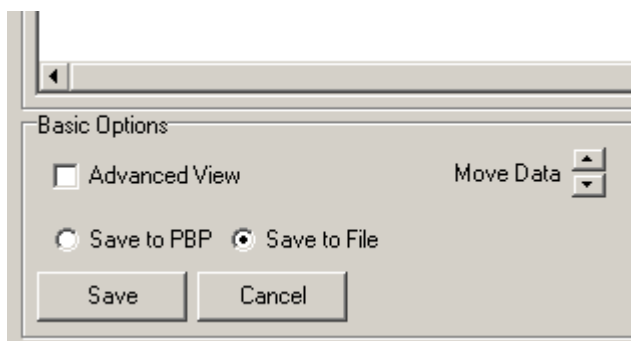


I name my movie Hoodwinked! (v2). Version 2, because it is the second version of the movie I have encoded. When you set the title just press **Enter** on the keyboard and the window will close. There is no need to change any of the other fields.

You get back to the initial screen where you can see the **TITLE** line has updated. There is no need to change any other settings in this file.



To save navigate to the bottom-left corner of the screen to the **Basic Options** section.



Select **Save to File** and then click the **Save** button. The **Save As** window opens. Check that you are still in the correct folder and then click **Save**. Do not change the filename! It will warn you that you will try to overwrite the existing file. Click **Yes** to replace it. And so we're done here as well.

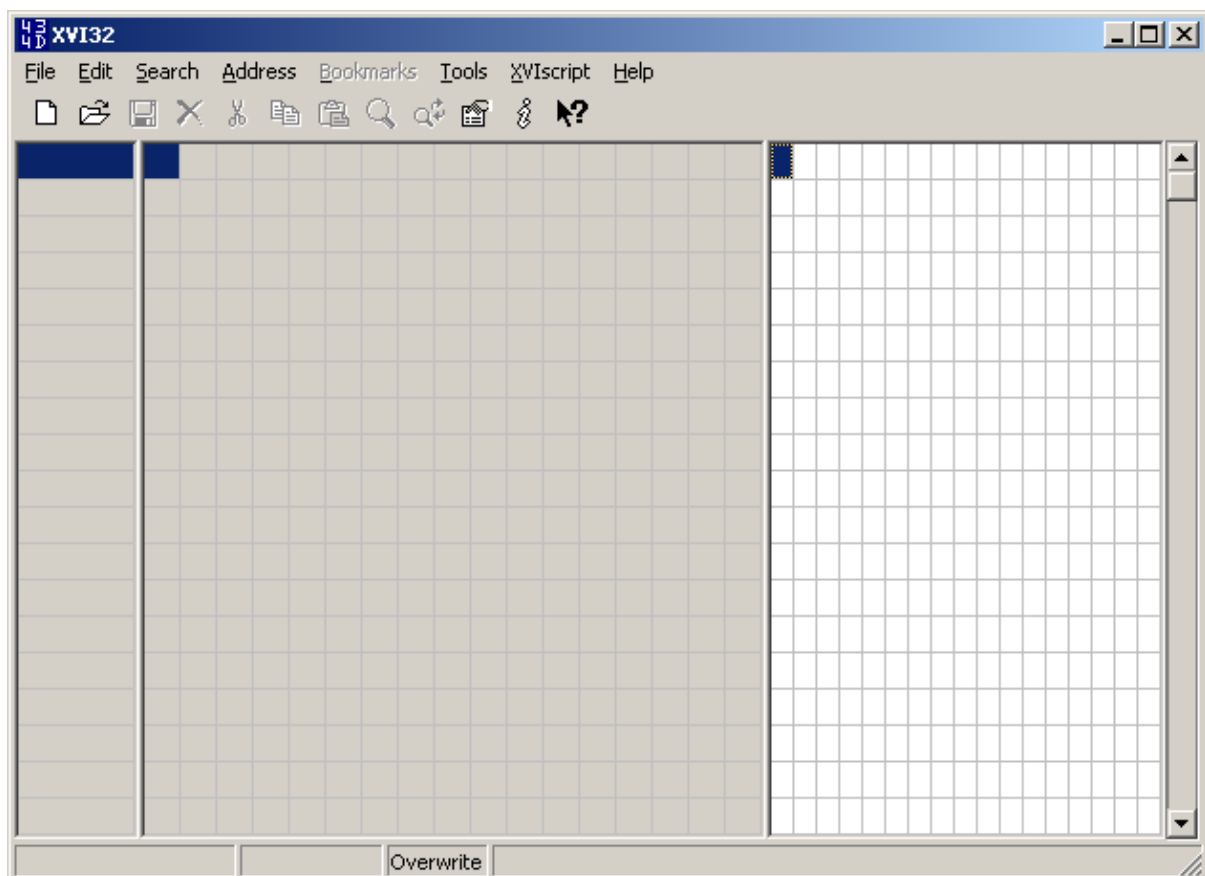


Next we are going to make our UMD unique to the PSP. We do this by editing the **UMD\_DATA.BIN** file. The tool we need for this is a Hex Editor. I will use XVI32.

First some background. Every time an UMD is loaded into the PSP it will read the UMD\_DATA.BIN file. From this the PSP determines if the UMD that was loaded is a new UMD, or one that was loaded before. So if you play a UMD, stop it, then load another, the PSP determines by reading this file that the UMD has in fact changed, and will reset some internal parameters, like for example the exact point in the movie where you stopped playing the UMD.

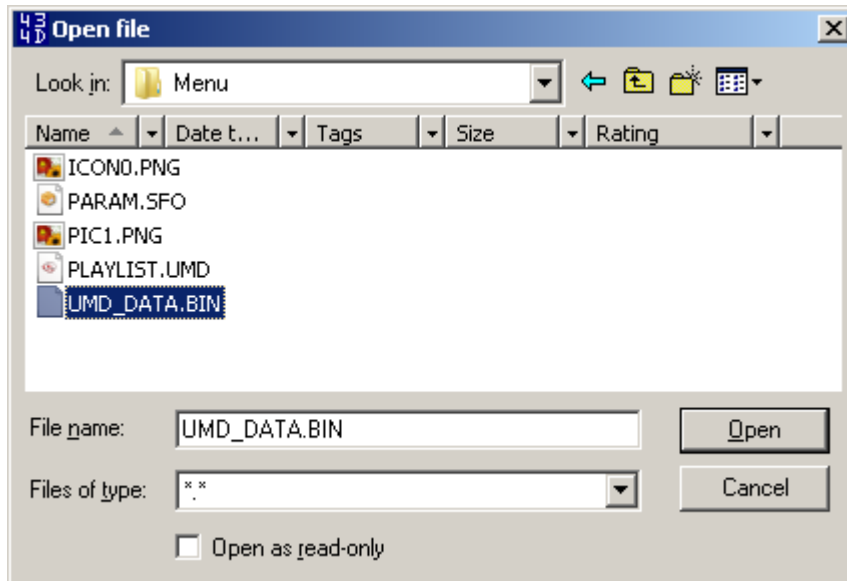
What would happen if in our case we made two custom movies and we used the same identical UMD\_DATA.BIN file? Well, the first custom UMD that you will load will play fine and will do everything it should. However, say for example we started playing the movie and stop it at exactly the 10 minute mark. If we now load the second custom UMD, the PSP will read the UMD\_DATA.BIN file and determine that it is the same UMD as before (while it isn't). If you press play now, the new movie will start from the 10 minute mark immediately and skip any menu there was. Now that's something we don't want, so we are going to edit the UMD\_DATA.BIN file so it becomes unique.

Start XVI32.

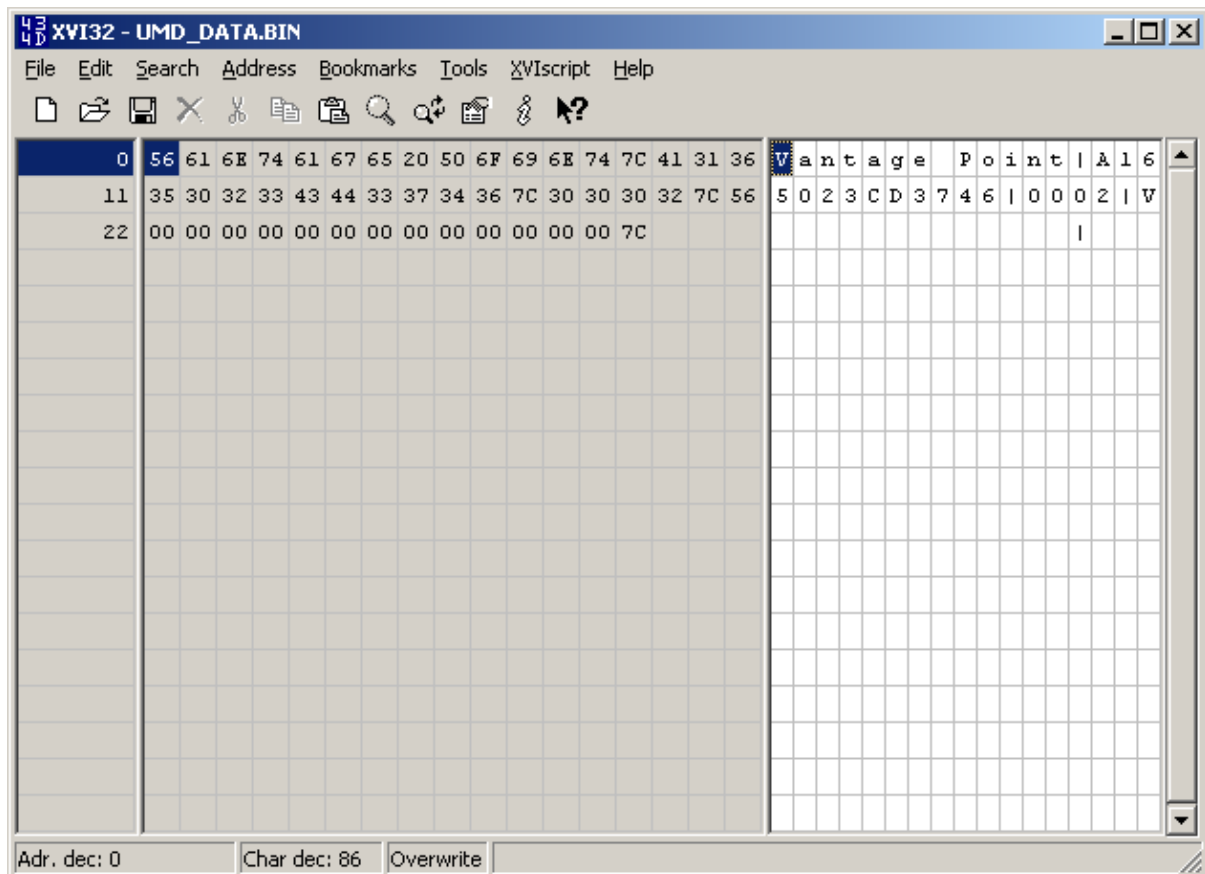


Click **File -> Open**

Navigate to your work folder where the file is located. Select **UMD\_DATA.BIN** and click **Open**.

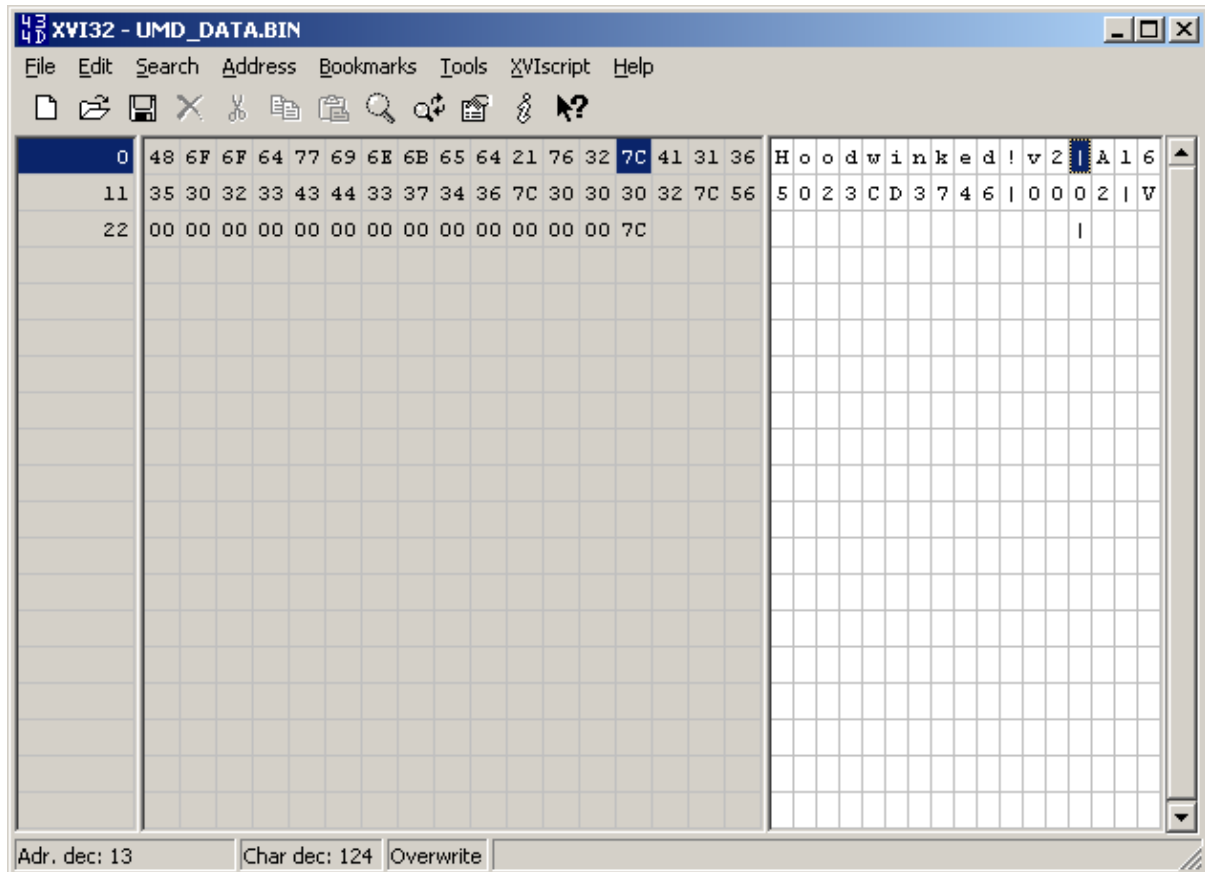


The file will load in the main window.



We are going to do our editing in the right white pane where you can clearly read Vantage Point in the example above. Edit **\*only\*** the characters that are before the first |. So that is the | that is directly after the **t** of **Point**. Do not edit anything else.

Change it to something unique. I will change mine to Hoodwinked!v2

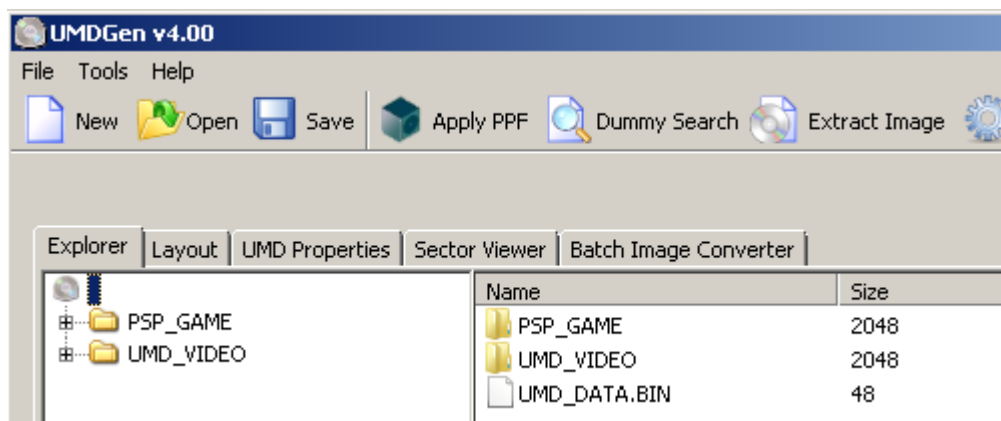


Once changed select **File -> Save** from the menu and it will write the changes to the file. Done!  
You can now close your XVI32.

There's now only one file left that we didn't edit yet, and that is **PLAYLIST.UMD**.

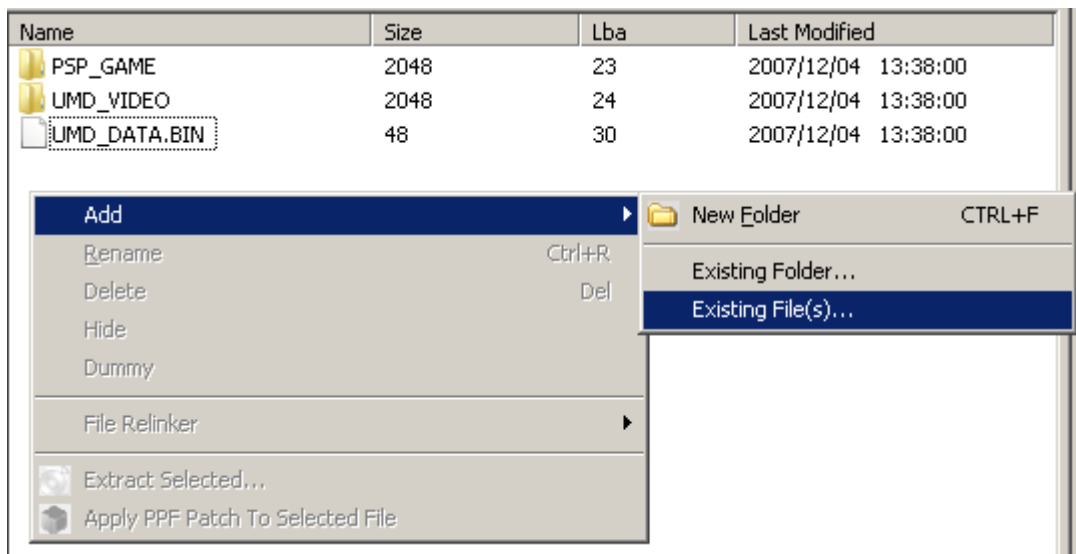
In PLAYLIST.UMD we can set the total playing time of the movie, the chapters of the movie and information about other media that's included in the UMD, like trailers, extras or the menu. I will get back to PLAYLIST.UMD in the chapters on Chapters and on Menus. Read those chapters for editing this file, and then replace the old file in the ISO by the new one by following below instructions.

It's time to put all the fields we edited and updated back into the ISO. We need **UMDGen** again.

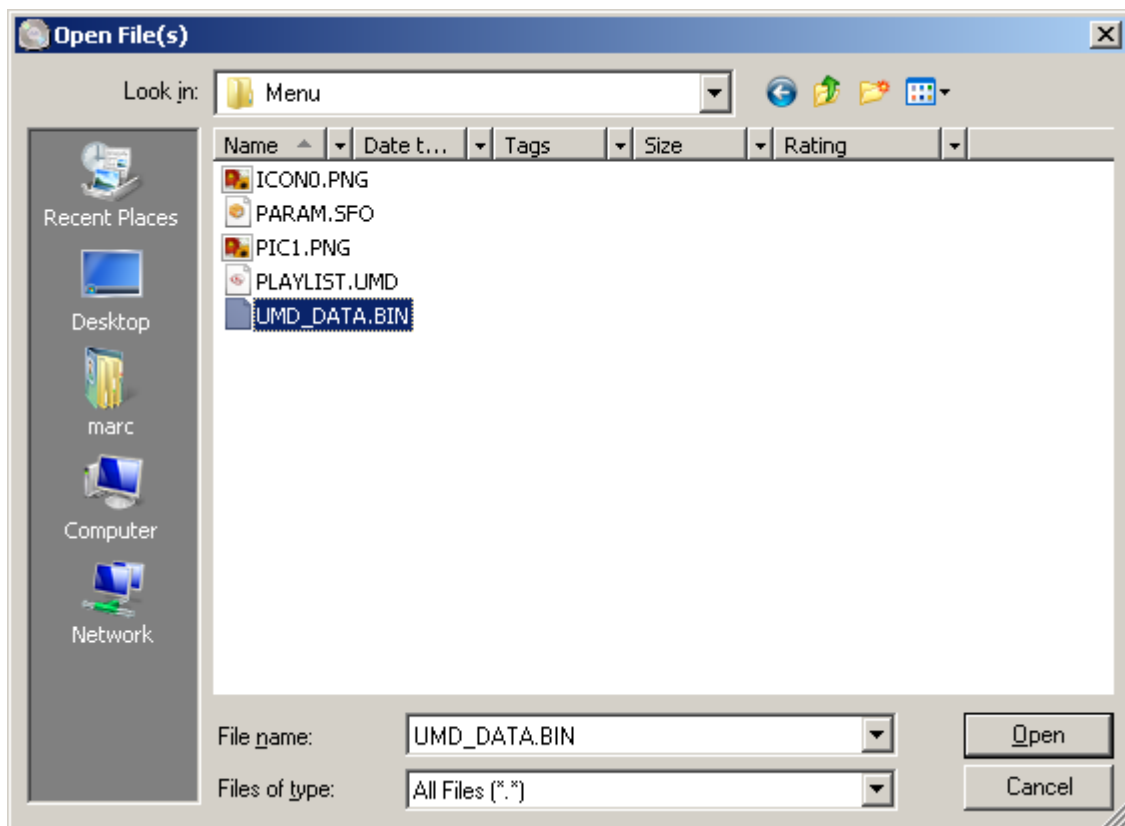


Open UMDGen and load your ISO file.

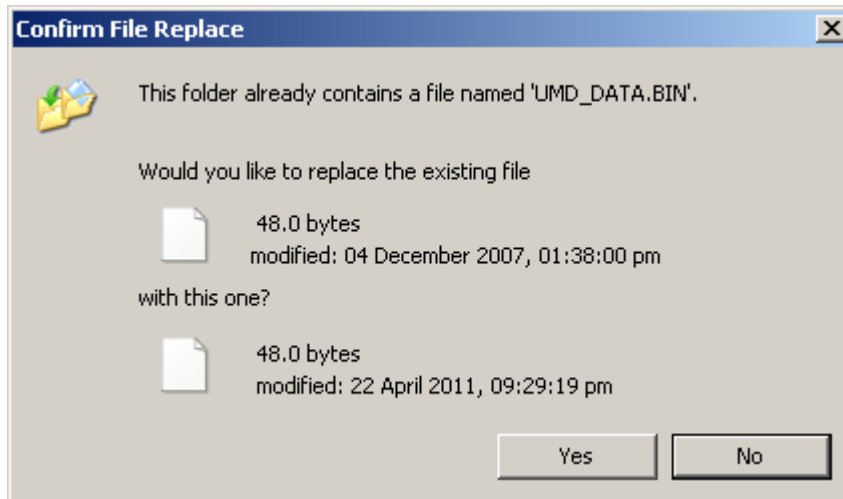
Right-click in the **right pane** and select **Add -> Existing File(s)...**



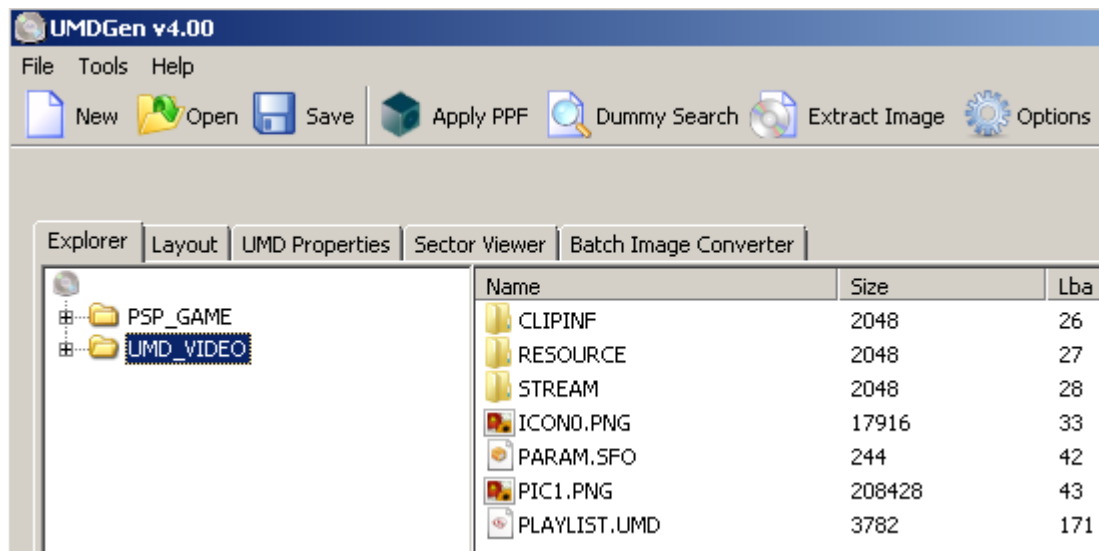
Select your UMD\_DATA.BIN file and click **Open**.



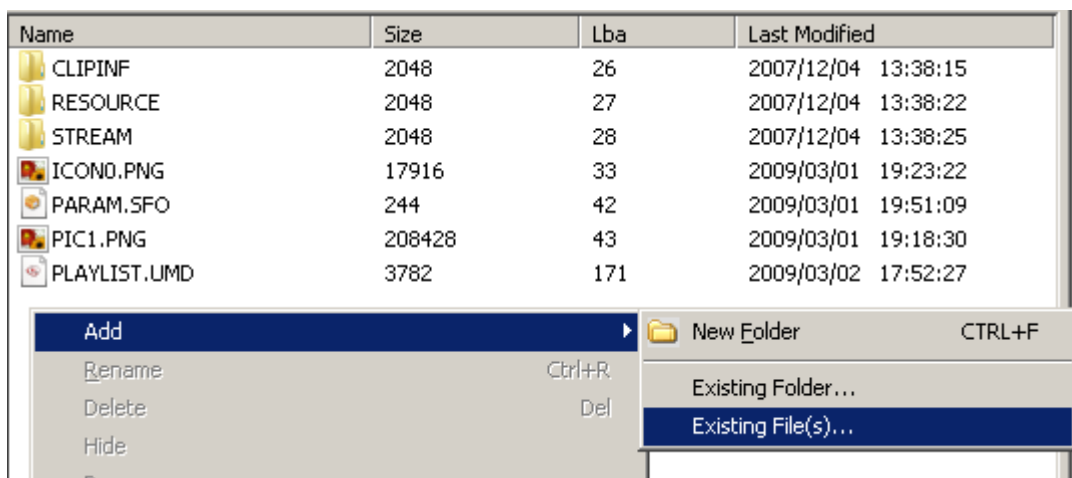
Confirm replacement of the file by clicking **Yes**.



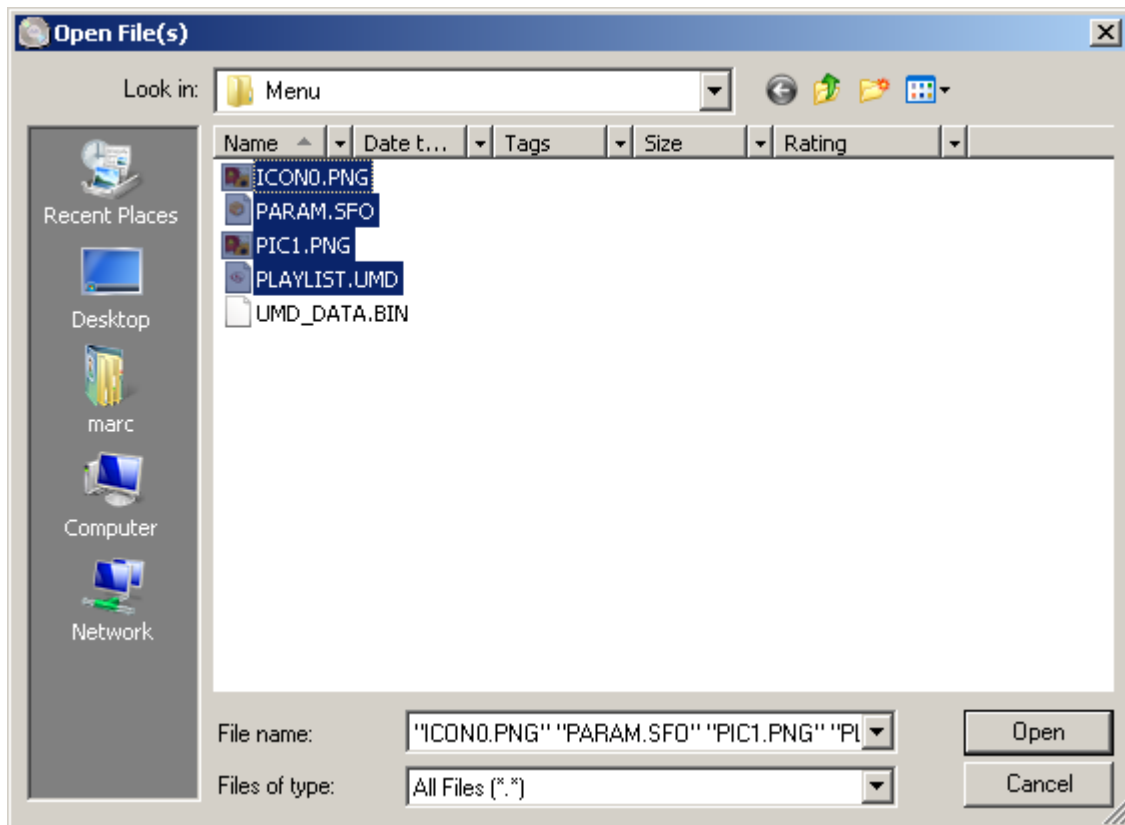
Now click on the **UMD\_VIDEO** folder in the left pane.



Once again right-click in the **right pane** and select **Add -> Existing File(s)...**

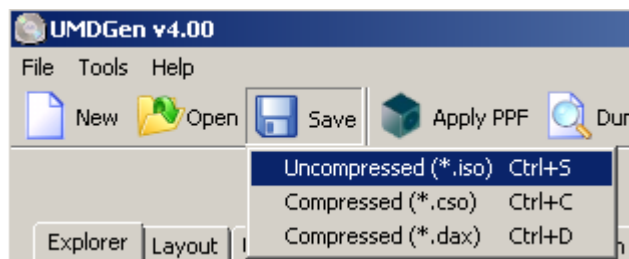


Select ICON0.PNG, PARAM.SFO, PIC1.PNG, and PLAYLIST.UMD all at once, and then click **Open**.

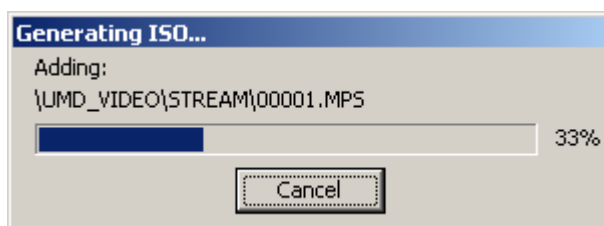


Confirm replacement by clicking **Yes to All**

Choose **Save -> Uncompressed (\*.iso)** to save the file.



**Make sure to choose a different filename!** Do **not** overwrite the ISO file that you opened in UMDGen. I will save it as Hood\_Beta2.iso. It will start generating a new ISO file.



You can load this ISO file into your PSP and check the changes.